For a[illegible] seven
221 months these bands go wandering across the prairie in search of small
[222] game, small animals such as caterpillars, spiders, grasshoppers, rodents, snakes, lizards, and so forth, and fruits, grains, roots or wild honey—in short, all that might keep them from dying of hunger. Their camps, set up for one or several days, sometimes for several weeks, consist of as many temporary shelters as families, made of palms or branches stuck in a semi-circle in the sand and connected at the top. This is the period when the quest for food absorbs all activities. The women equip themselves with digging sticks, and
221 411 184 the men hunt with the bow and arrow, of which several types must be distinguished. The eastern groups have a bow with a flat section which evolves toward a convex-plane section or a concave-convex section when one moves westward. As for the arrows, those made for hunting birds have a blunted tip. Arrows for fish have three to five points, each one formed like a minute harpoon, and the stem is without barb. The poisoned arrows (1), whose tip is protected [15]

1. See below, p. 95.

by a sheath of bamboo, are reserved for hunting monkeys and small game. Those for large game have a long lanceolate point. The barb is attached or sewed on. Besides the bow and arrow, the men use a club
[189] which often takes the form of a javelin, and its use is reserved for magic and war operations (1).

1. Cf. below, p. 99.

824 The primary materials of the indigenous industry consist of varied
825 woods, wax from wild bees, resin, fibers of the buriti palm trees (Mauritia vinifera) and tucum (Astrocaryum tucuma) bone of the monkey, teeth and claws of mammals, fur (only to make ornaments), feathers, quills of porcupines, vegetable shells and river shells, stones,
412 cotton and grains. As implements they have knives made from a sharp piece of bamboo, from stones crudely fashioned, or from fragments of iron or steel obtained through exchange, and fixed with the aid of wax and cord between two pieces of wood forming the handle. Drills are made of a borer of stone or iron mounted at the end of a stick
[177] which they turn between their palms. The Rondon Commission expanded the use of axes and metal hammers, and the old stone axes serve now only as small anvil blocks for fashioning shell or bone.
[415] The use of stone polishers must also be mentioned and, among the objects of current usage, the spindles, combs, baskets and gourds to carry water.

593 The conversation becomes animated and laughter spreads. In the dark
182 prairie the camp fires burn. Around the fire, the only protection
462 against the cold which descends, behind the frail windbreak of palms
[342] and branches hastily planted in the ground on the side where wind or
[415] rain is expected; near the baskets filled with poor objects which constitute their whole earthly treasure; lying on the ground which extends around, haunted only by other bands equally hostile and fearful, the couples, embracing tightly, are truly seen as the support of one another, the comfort, the only help against the daily difficulties and the dreamy melancholy invades the Nambikwara soul from time to time. The visitor who camps in the brush with the Indians for the first time feels tenderness as well as anguish and pity before the spectacle of this humanity so completely unprotected; crushed, apparently against the soil of a hostile land by some implacable cataclysm; naked, shivering around the hesitant fires. He circulates tip-toe among the underbrush, in the dark, avoiding crushing in his walk a hand, an arm, a trunk, whose warm reflections are seen by the light of the fires. But this misery is animated by whispering and laughter. [56] The couples clasp one another as in the nostalgia of a lost union. Their caresses, at the same time tender and candid, are not interrupted by the passage of the stranger. One senses in all
[57] of them an immense gentleness, a profound carelessness, a naive and charming animal satisfaction, and, emanating from all that, something like the most moving and credible expression of human tenderness.

593 Thus it is not surprising that the attitude of the two sexes as con-
831 cerns one another is characterized by intense interest. This interest
462 is translated in certain cases by the vocabulary. In fact the Nambikwara
562 have only one word to express "pretty" and "young," and a single word to
[517] signify "ugly" and "old" (munɨ̨ene, jeʔene, bl). Their esthetic judgments are thus based essentially on human considerations, and above all, sexual ones. But the interest which is manifested between the sexes is of a complex nature. Men judge women in a mass, as being a little different from themselves. Depending on the situation, they consider them with desire, admiration, or tenderness. In itself the confusion of terms pointed out above constitutes permanent homage. But it must not be forgotten that the form of economic adaptation realized by sexual division of labor a capital role attributes to the women, since family life rests to a very large degree (probably the greatest) on the collecting of the women, but it represents an
[83] inferior type of activity. The ideal life is conceived on the model of agricultural production or hunting. To have plenty of manioc, and

622 and oxen for carrying could pass. The provisions of manioc proved to be insufficient and one morning the little band found itself without anything to eat. Our own attempts to kill some animal were in vain, and the worst [88] bad humor began to reign, the chief of the group being obviously held responsible for an affair which we, he and I, had contrived. In place of undertaking a hunting or collecting expedition, each one decided to go to sleep in the shade of shelters, and they left the chief alone to find the solution to the problem. He disappeared, accompanied by one of his wives (his first wife a2, 622 contrary to usual procedure; but a3 and a4 shared the general irrita- 416 tion) and toward evening both were seen reappearing, their heavy baskets filled with grasshoppers which they had spent the entire day [262] catching. Although grasshopper pie is not a particularly esteemed dish, everyone ate with good appetite and found his good humor again. They took up the journey again the next morning.

But other things than these exceptional relief measures are expected of the chief. He must sing and dance willingly and well, and be capable of animating the collective life. He must organize the work in the most reasonable way in order to eliminate useless fatigue and effort. Thus on the eve of a departure, B1 recites for us his order of march:

30. mãdɔ́rige mãdohaʔdhudne haitehãdige nãnjehnile
ɰietnonaʔnahara jãuehara kanahaniʔndeere hinkɔ́naha
iinɨ́amnjẽ ʔkeena iinãmnjẽ ihikɔ́ro ihikɔ́ro. (b1)
When it is hot, one is tired, one is hungry, the
children walk badly; when one marches at dawn,
one marches well, at dawn, one should march, change
routes, march; on the way! on the way!

He must also win over his companions by numerous gifts. According to B1, who gives in willingly to the servitude of power, generosity plays a fundamental role in determining the degree of popularity which the new chief will enjoy, and the companions indulge in all sorts of speculations:

31. ɰilikã̃ aheni ʔinire tunun ʔentutnɨɰilikã̃ agnhaʔhare
tunũriani (b-1)
The chief is leaving; the one who will come will give me
a great deal. --"Chief! Be generous! Give to me!"

The presents thus anticipated consist of food or objects which the chief will have made himself with the assistance of his polygamous wives, or that he will have procured by good exchanges with neighboring bands, or which might come from war booty. Often, it seems,

721 Excitement and enthusiasm decline, and the group returns home.
But some are pushed until realized, [95] and can be very murderous.
726 The Nambikwara usually attack at dawn and extend their ambush by
dispersing throughout the bush. The signal for attack is given from
[534 202] place to place, thanks to the whistle which the Indians carry hanging
from their necks. This little whistle, composed of two bamboo tubes
[136] tied with cotton thread reproduces the cry of the cricket approximately,
and doubtless for that reason has the same name (kalõde) as this insect.

MAGIC, RITES AND RELIGIOUS BELIEFS

278 Some beliefs of a magical and religious character also play
[771] their role in social life. The most important is the notion of
nãnde (bl). To analyze it, we should first say a few words con-
cerning poisons. The Nambikwara are very expert poisoners. They
make curare for their arrows, or at least for some of them, pre-
● [415] served in little earthen pots. (1) Without enlarging here upon the

1. The study of the Nambikwara curare was made, on the occasion of our expedition, by our friend and companion Dr. J. A. Vellard. Cf. Vellard, "A preparacão do curare pelos Nambikwaras," Revista do Archivo Municipal de São Paulo, LIX, 1939, p. 5-16; "Communication à l'Académie de Médicine de Paris," id. LVIII, 1931, p. 117-118.

manufacture of the curare, it must be noted that this preparation, although reserved for chiefs and sorcerers, is not surrounded by any ritual and does not give rise to any magical operation. The Indians make the curare publicly, applying recipes and taking precautions which are either essential to the effectiveness of the product or which constitute simple prejudices, but all of which have a positive character. Their attitude towards this poison thus may be considered as scientific. Along with curare, the Nambikwara know other poisons likewise of vegetable origin, and which take the form of powders
[415] contained in small tubes. These are made of quills, feathers, or stalks of bamboo or other wood, cleaned out and corked at both ends with a piece of vegetable pith or cotton, and sometimes decorated with red dots and lines made with urucu paste. (2) These tubes are

2. Cf. Rondonia. Roquette Pinto collected examples of these tubes and reproduced one of them (Rondonia,

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●[415]

p. 239 and Fig. 34), but seems not to know their usage nor the nature of their content.

usually tied in bundles of two or three or more, and thus all the Indians possess a provision of poison from which they rarely become separated. We were not able to find out anything concerning the preparation of these drugs, but it seems that different varieties exist, used either by men or women. Notably, the poisons whose small doses are contained in the feather quills would be [96] according to an informant, women's poisons, and also much more to be feared. The "tube poisons" (as compared with the arrow poison which is only employed for hunting, and never for war) play an important role in inter-individual relationships. They are the usual instrument for amorous or commercial vengeance. To define these poisons, there are special terms according to dialects. Thus the arrow poison has a special name: inãru (a1); dãdnesu (a2); tiĩre, nãnde (b1); ãĩrare (b2); iriụã (c). But all of the arrow poisons and tube poisons are called by a more general term, belonging to dialect b1, but which is understood and used by all the groups: ĩãnde, which one might be wrongly tempted to translate as poison. It must be noted, however, from now on that in the case of tube poisons, the term nãnde means the tube and its contents simultaneously.

789 However besides these "true" poisons which we shall call scientific, there are other substances whose supposed action is of a purely magical character. Certain tubes contain, not a powder meant to be mixed with food, but fragments of resin of the tree called "barrigudo" or [824] "barrigudeira" in Portuguese (Bombax ventriculosa) and sahãrudĩtããru (a1/2), irĩdare (b1), iakĩụa (c) in Nambikwara. These fragments are used for certain "magic projections" which are carried out in the following way: a fragment of resin is placed between the lower edge of the palm of the left hand, held horizontally, and the tip of the index of the right hand held vertically (position called iuuehãre [a1]). By exercising strong pressure of the finger on the edge of the other hand, the index trips and throws the small projectile as far as several meters (asatããkedjuzu [a1], adãmdige [b1], ndãmdige [b2]). It is believed that the person reached by a fragment thrown in this way will become like the trunk of the barrigudo tree, narrow at the base and at the top and bloated in the center. He will fall ill, his stomach will begin to inflate, and finally he will die. This method of throwing is also often used for teasing, especially children, and to bombard an adversary with small fruit, with pieces of dirt,

1: Lévi-Strauss E-5 (1938-1939) 1948 SP17 Nambicuara SP17

[End Plate I]

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1. Characteristic aspect of the savannah during the dry season. 2. A native garden in the middle of the gallery forest. 3. Travelling.

1: Lévi-Strauss E-5 (1938-1939) 1948 SP17 Nambicuara SP17

[End Plate II]

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1-2. At the site of the semi-permanent village of group a1 (cf. p. 48). 3. Forced halt on the road by the same village (cf. p. 87 ff.).

1: Lévi-Strauss E-5 (1938-1939) 1948 SP17 Nambicuara SP17

[End Plate IV]

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[432
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[231
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1. Return from the bath. 2. Native C11 leaving for a solitary hunting expedition. 3-4. Camp life (cf. p. 16). 5. Little girl looking for edible roots and carrying a little monkey (Lagothrix sp.) on her head. 6. The two little girls a8 and a9 (cf. p. 42).

2: Lévi-Strauss E-5 (1938-1939)1948
SP17 Nambicuara SP17

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PLATE 27.—Nambicuara and upper Guaporé Indians. *Top:* Pimenta Bueno hut. *Center, left:* Nambicuara family shelter. *Center, right:* Nambicuara man wearing an armband. *Bottom, left:* Nambicuara family. *Bottom, right:* Woman drilling a mother of pearl earring. (Courtesy Claude Lévi-Strauss, except bottom, left, by courtesy American Museum of Natural History.)

[end plate 2]

clude at least one stretch of river and the "galeria" forest which lines its banks. Except during the planting and harvesting season the members of the band are on the move up and down the narrow confines of the territory. Within this hunting territory they have camping places rather than villages. A semipermanent camp site where fields are cultivated for 2 or 3 years is known as *sinoidesu*. Any place where the band or a family may stop overnight is known as *sidnou*. At present the Wakitisu band has one house (*sisu*) at the place where it is farming. The entire band occupies the house, each family having its own fire around which it sleeps at night. The unmarried men gather around another fire. Julio informed me that their house is rectangular with stake walls and a gable roof covered with sapé thatch. Some years ago when the band was larger he said they occupied a different place on which they built three houses. These houses were built by placing a series of saplings into the ground to form an oval. The tops were then fastened to a ridge pole, the framework being covered with sapé or palm fronds. A smaller beehive-shaped house is made in the same way. Houses of this type are from 6 to 10 feet high. Near the living house they build a small flute hut (*sinoditakisu*) and, when the occasion demands, a shaman's hut (*sikidentsu*).

If the weather is cold while they are out hunting the band or the family may build a temporary brush hut for the night. Sometimes only a windbreak (*siotdutsi*) is considered sufficient. On warm nights during the dry season the group camps under a tree. In favorite hunting places the same camp site will be used repeatedly. When the soil around the permanent camp site or village becomes exhausted, fields are cleared some distance away and small huts are put up for the workers. As the distance increases the old camp site is eventually abandoned and a new camp site is established.

As the Nambicuara do not use hammocks, beds, or seats, there is not much in the way of furniture in their shelters. Utensils are restricted to a few gourd vessels, tin cans, burden baskets and small flat baskets, fire fans, bows and arrows, and tools used by men. When they move, these articles are placed in burden baskets which are carried by the women. The Wakitisu do not

4: Oberg E-5 (1949)1953
SP17 Nambicuara SP17

252 The Nambicuara method of processing manioc in comparison with that of the Camayurá is simple and crude. The following describes the method used today: Marciano's wife dug up a burden basket full of manioc from a field belonging to the Protestant Mission. She sat under a tree [171] and peeled the tubers with an old butcher knife (formerly a piece of bamboo was used). She washed the peeled tubers and placed them in a calabash. She then took a grater made from a piece of kerosene box about 2 feet long and 6 inches wide to which an 18-inch strip of perforated tin was nailed. She placed one end of the grater in a larger copper basin (belonging to the mission) while the other end rested on the edge, and while steadying the grater with one hand she grated the tuber with the other. The tubers did not stand in water nor were they dipped in water during the process of grating.

After the tubers were grated she dipped out a calabash full of mash and began pressing it with her hands and pouring the juice into another calabash. After she had drained off as much juice as possible she picked up a handful of mash (*wáhaeru*) and rolled it and squeezed it until no more juice could be expelled. This ball she placed in another calabash and continued making balls until the calabash was full. She then patted down the balls to form a round loaf about 10 inches in diameter and 4 inches thick, which she set out on the bare ground to dry in the sun. [251] After several days in the sun these loaves get hard and dry and form the storable product (*hinokónaeru*) from which the edible cake *hi'tsáiv* (also called *wahóaeru*) is baked. The juice (*syduse*) which was left in the calabash she poured into a slight depression in the ground, and after the liquid had drained off she collected the thin film of starch flour (*ahutsáiu*) along with some sand, rolled it into a ball, and placed it in hot ashes to bake. [415] The lack of pottery vessels prevents the Nambicuara from saving and boiling the juice. They know, however, that the juice is valuable, and when they have cooking vessels they boil it to form a thick porridge.

When the Nambicuara wish to prepare a greater quantity of pulp they use a piece of bast for a press. This is a piece of embira bark about 3 feet long and 8 inches wide called *sáva*. A woman rolls a ball of pulp in the strip of bark and twists the bark until the pulp is dry. The balls are then

4: Oberg Σ-5 (1949) 1953
SP17 Nambicuara SP17

subsistence activities. For instance, they say that they eat the blossoms of certain plants and a great number of grubs, larvae, and insects. A favorite dish is to crush in a mortar manioc cakes with boiled beans, broiled meat, ants, palm nuts, monkey and bird bones.

As an example of the variety of uses to which the Nambicuara can put a plant we can take the buriti palm: (1) They eat the pulp surrounding the scaly covered nut. (2) They use the fibers from the new growth to make twine. (3) They use the tough, flexible cortex of the frond stalk for making baskets. (4) They fell the buriti so that a certain variety of grub can collect and multiply in the starchy pith in the heart of the tree. The grubs or larvae they then eat uncooked. (5) The dried frond stalks are tied into bundles and used as floats for crossing rivers. In addition, the buriti palm has male associations, for only men can prepare its products. When a male child dies a piece of buriti fiber is left over his grave.

The Nambicuara make fire by the drill method. They cut two round pieces of dry stick about 18 inches in length and three-quarters of an inch in diameter from some bush that has a soft pithy center. The lower stick is split and into the flat side shallow notches are cut to hold the drill in place. The drilling stick is then inserted into the notch while the lower stick is held in place by the toes of the man as he squats over it. He then begins to twirl the stick between his palms, pressing downward. As his hands reach the bottom, he quickly brings them to the top and continues drilling until the pith in the lower stick loosens into small smouldering balls. These he places into a handful of dry buriti fiber and begins to blow on them until the fiber ignites. About 2 minutes is all that is required to make a fire by this method.

MANUFACTURING

The material equipment of the Eastern Nambicuara is extremely simple. Many items, such as the conical trap for catching fish, the floats for crossing rivers, the loom for weaving arm bands, and the mortar and pestle for crushing food products are made for the occasion and are discarded when the task is completed or when the people move. The small grater and the few gourd vessels, small baskets, and twine, the woman carries

[p. 92(5)]

412 in her burden basket, whereas the modern axe,
●415 knives, and other tools, along with his ornaments, the man carries in a similar basket; or he straps this basket on the [illegible] in front of [illegible] his carrying his bow and arrows or gun ready to shoot whatever game is met along [264] the way. Whenever they kill some animal or catch a few fish and feel hungry they stop and prepare a meal. During the dry season they are at home anywhere in their band territory, moving only when hunger spurs them on.

411 Today, of course, the Nambicuara have steel
412 axes and knives. The heavy equipment of the
177 Wakitiu band in 1948, consisted of three axes, two shotguns, and some half dozen hoes which were hidden near their permanent house. Each man had a butcher knife, but all men did not have bows and arrows. There did not appear to be any desire on the part of each man to possess these implements. So long as the band had a few of these objects everyone seemed to be satisfied. Cascudo, a widower when he arrived in Utiarity, did not possess a bow and arrow, nor a gun, nor an ax. By working for the Protestant missionaries he acquired an ax and when Marciano [439] died he inherited his bow and arrows. After a few days, however, he had given the bow and arrows to a Brazilian in exchange for a felt hat.

412 Examining the hand tools which Julio used, the following articles were found: A chisel (*kwatéru*) made by inserting a piece of steel into a wooden handle wound with twine; a small bamboo [306] knife (*alkálwa-likatu*); a hardwood drill (*kókatu*), used with sand for perforating tucum nut shells in making beads; a piece of sandstone (*dálipiru*), used as a whetstone; a number of rough leaves of the *kwiro* tree (*kiz'éuatu*), used as sandpaper; and a
415 comb (*ka'dlatu*). Each of Julio's three wives had a burden basket, a small square basket, and two or three gourd vessels of various sizes. A single wooden mortar and pestle did service for the whole band.

411 One of the most important implements of the Nambicuara is the bow, *kálkiza*, made from the piuva (jacaranda-copaia) or the *úiriva* palm (*Syagrus sporioce*). By far the most common is the bow made from piuva, ranging between 6 and 7 feet in length, flat on the inside and convex on the outside. One of the bows examined measured 2 meters and 14 cm. in length, 4 cm. in width, and 1.5 cm. in

[p. 136 (I)]

7: Roquette-Pinto--22D E-4, 5 (no date)1938 SP17 Nambicuara SP17
(ca. 1912)

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Fig. 10. Mortar of the
Serra do Norte Indians

7: Roquette-Pinto--28C E-4, 5 (no date)1938 SP17 Nambicuara SP17 (ca. 1912).

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Fig. 24. Clay pot of the Serra do Norte Indians (1).

1. Today, the [National] Museum owns several large ceramic vessels brought from the Serra do Norte. The piece illustrated here deserves special mention, for it was the first one obtained in 1909.

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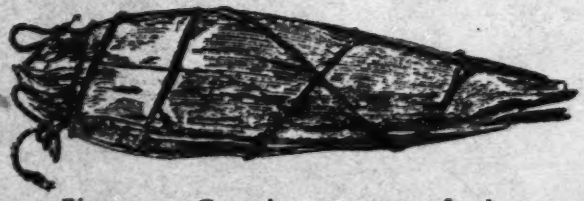

Fig. 25. Container to protect feather ornaments.

7:Roquette-Pinto--30B E-4, 5 (no date) 1938 SP17 Nambicuara SP17
(ca. 1912)

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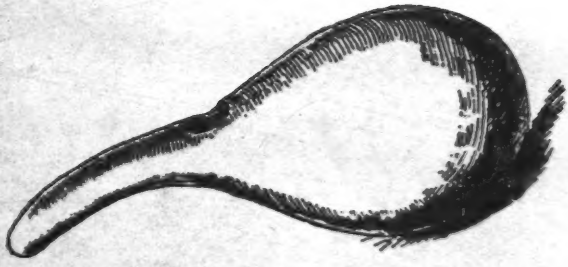

Fig. 28. Tobacco gourd.

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Fig. 34. Bamboo tube containing a dark powder (paricá?).

241 [Plates p. 254]

[249] Yet a wild form of manioc has been found (Manihot utilissimo, Pohl); if not the very species we use, at least one of the same genus. But maize?

Where on the surface of the earth does maize exist in a wild state except for the tunicated Zea mais which is sometimes considered to be the ancestor of the modern species?

What unveiling of mysteries, if this question were to be answered!

Some Tagnani who were watching the herdsman João Lucas weed a small plot in Três Buritis began to laugh at him, indicating that it would be better to root up the weeds; the hoe severed the stems but left in the roots, and the plants would grow up again. When the Nambicuara weed, they pull out everything that is not useful. Their plots are always clean.

Their tobacco is the Nicotiana that grows wild in their mountains; it may not properly be said that urucu and cotton are cultivated: they are planted and utilized. Some large beans of various kinds de-
278 241 serve mention. [250] They are to be found in the Indians' baskets along with many other plants; but we never saw an Indian eating them or making any use of them. Pending further research, I am of the opinion that they are saved for medicinal undertakings carried out in secret by old men and women. The same may be said of the castor oil plant (Ricinus communis), which is definitely adventitious.

[Fig. 39]

● 415 The spools of cotton fiber that await spinning and the seeds saved for future use are kept out of the weather, dust and rain in bags made of straw or pacova leaves.

[Fig. 40]

759 It seemed to us that medicine was not exercised by any special segment of society. They all take part in the treatment of certain diseases; in serious cases, an experienced elder takes over.

752 Wounds are dressed with straw fibers [coated] with certain resins (jatobá). Burns are treated with cold water. Fractures and dislocations are reduced haphazardly.

7:Roquette-Pinto--40A E-4, 5 (no date)1938 SP17 Nambicuara SP17
(ca. 1912)

415

Fig. 39.
Straw container used by the Serra do Norte Indians to store Cucurbitacea seeds (Lagenaria?)

7:Roquette-Pinto--40B E-4, 5 (no date)1938 SP17 Nambicuara SP17
(ca. 1912)

●415

Fig. 40. Cotton thread (kondzũ) wrapped in leaves.

7:Roquette-Pinto--47A E-4, 5 (no date) 1938 SP17 Nambicuara SP17
(ca. 1912)

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Fig. 47. Painted gourd.

7:Roquette-Pinto--47B E-4, 5 (no date)1938 SP17 Nambicuara SP17
(ca. 1912)

[opp. p. 260]

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Juina River Indians

Juina River Indian

7:Roquette-Pinto--48A E-4, 5 (no date) 1938 SP17 Nambicuara SP17
(ca. 1912)

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Fig. 48. Designs of the
Serra do Norte Indians.

Fig. 49. Designs of the Serra do Norte
Indians.

7:Roquette-Pinto--49A E-4, 5 (no date)1938 SP17 Nambicuara SP17
(ca. 1912)

● 415
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Fig. 50. Designs of the Serra do Norte Indians.

7:Roquette-Pinto--56C E-4, 5 (no date)1938 SP17 Nambicuara SP17
(ca. 1912)

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Fig. 62. Pot containing pitch.

7:Roquette-Pinto--57 E-4, 5 (no date)1938 SP17 Nambicuara SP17 (ca. 1912)

226 Tephrosia toxicaria is a poisonous legume, a kind of tingui
824 [Lupinus cascavella] used in fishing.
278 They are not familiar with the fishhook, and use [276: full page of figures] [277] a sort of fish trap made with bamboo or with the stem of the titara liana (Desmoncus sp.).
262 The following foodstuffs are represented in the collection.

--Guaiatú: white maize.

--Urinodzu: manioc dough, which under microscopic examination proved to be very rich in starch grains. The root, once grated, 252 is pressed [by wringing] with a straw cord, the caaru. (1) The grater
[415]

1. [Heloisa Alberto Torres notes that the cylindrical tube used to press manioc by some Amazonian tribes must have spread from the Guianas to the valley of the Amazon. Métraux considers the woven band used for the same purpose and found on the periphery of the tube territory a more primitive form. The simple straw cord of the Nambicuara would thus constitute an even more primitive variant.]

is of the type used by the Xingu Indians (Suya, etc.). It consists of a board with about two [twenty?] rows of small sticks.

[Fig. 17]

262 --The larvae of a butterfly, which they eat alive.

--Katunuzú: anthill clay, which they also eat.

. . . . . .

[824] --A mushroom, orelha de pau (Polyporus sp.), which is eaten, and beans (Phaseolus sp.) of unusual aspect were also found in one village. [278] The smoked [moqueada] head of a great anteater was [251] found in a basket by Miranda Ribeiro during the 1909 expedition.

415 Mortars (nutêzê) are hollowed out by means of fire and used to
252 pound meat and other foods.

372 They make fire with mastic resin sticks, the tips of which are wrapped in straw to protect them from the rain.

[Fig. 63]

241 415 Their plots are worked with pointed sticks. The seeds of urucu, gourd plants (Lagenaria) and cotton are kept in leaf containers.

278 824 Medicinal fruit (Solanum mammosum) is also saved, as well as roots, leaves, etc.

[Fig. 31]

386 The collection contains two samples of dyes: a paste of urucu and fat, sweetly scented, which the women use to paint their body after the bath (huduhukaidi); and a variety of red ocher. [279]

248 Cotton (1) is represented by seeds (rim de boi variety) in leaf

[171]

1. According to the studies of Fa. Schmidt and Nordenskjöld (concerning hammocks), cotton reached Brazil from the Andes and was cultivated mostly by the Tupian Indians in the midst of the Amazon jungle. It is used less extensively among the Arawakan Indians. This distribution, due in part to the needs of the plant, explains its presence among the Nambicuara, who are located at the extreme west of the plateau. (R. L.)

[283 286] containers; cotton thread (kondzú) from a spindle (gdaretatú); skeins [855] of spun cotton; cotton fabric (sareguêzê--strap used to carry children). The spindle is made of a palm splinter imbedded in a round [283] potsherd.

[Fig. 64]

415 924 Kateçú are fruits of the Lagenaria genus used as containers and storage vessels. Some hold crudely chopped tobacco and are stoppled with a corn cob, a method frequently used by the frontiersmen.

[See fig. ... (28) p. 30B.]

/214 cont./

278 Only the bark of the roots impregnated with a reddish,
224 gummy juice is used in the preparation of curare. The plants which grow in sandy places are considered to be richer in poison; they are recognized by the bright red color and moisture exuding from incisions made in the bark. Roots from clayey earth are dry and considered incapable of giving an active product.

The Ñambikwara of the Juruena consider it essential to gather the roots in the morning at dawn before the sun gets too hot, and they only use fresh bark. The Çabanè use dried, stored bark by preference.

Çabanè Curare

278 The preparation of Çabanè curare may be taken as typical. It comprises three main operations: draining of the bark in portions with fresh water; rapid boiling to rid the product of some of its impurities; slow concentration at low heat.

[H2] Immediately after their harvest the roots are washed and then scraped with a splinter of bamboo or a piece of iron to detach the bark. Small, very fine shavings are thereby obtained which are dried and kept in baskets or gourds.

• [H5] Draining of the bark. The bark is placed in a small, elongated basket (kọnọsimatá) of bamboo lamellae reinforced by large leaves (kọnọkọnọsi) and hung by two vertical supports over an earthen dish. Over the bark they pour 200 to 250 cubic centimeters of cold water; a blood-red liquid filters off slowly. The filtering takes 15 to 20 minutes; when it is almost over fresh water is again poured over the bark. This operation is repeated six to eight times until the bark is exhausted (Pl. IV, A-B).

[H2] Boiling on a brisk fire. After each operation the liquid obtained is poured into a receptacle placed directly over a strong fire; it is constantly /215/ stirred with a wooden spatula and does not take long to boil in large bubbles. When it

/215 cont./

278 threatens to overflow it is removed from the fire for a second and then put back to boil. A thick, reddish scum forms which [412] holds the largest impurities; it is removed as it appears with a straw from a palm tree (Pl. V, A). After five to ten minutes on an average the boiling diminishes; the liquid turns brown and begins to thicken. It is then taken from the fire and [415] poured with the aid of a funnel (kõli) made from a rolled leaf into a new receptacle to be concentrated (Pl. IV, C).

[415] [417] Concentration. The concentration is done in a receptacle (here, a tin can from the mission) suspended 40 or 50 centimeters above a small fire, into which successive portions of liquid are added as they are prepared. The concentration takes two to three hours. According to its degree /of concentration/ they obtain a thick blackish-brown liquid, reddish when looked through, ready to be applied to the arrows with a straw, or a black paste which becomes very hard on cooling and can be kept for a long time. Before being used this paste must be softened at low heat.

The Çabanè recommend that one not touch the curare with the fingers nor even breathe the steam from it during the boiling. This hypothetical toxicity of the steam had already been noted by former travelers; it was even asserted that these emanations were so dangerous that the Indians had the curare prepared by old women who almost always succumbed to it. One can see (Pl. V, A) that the Çabanè sorcerer is not afraid of it.

Curare does not enter healthy skin, and the Nambikwara of the Juruena press the water-soaked bark between their hands, taking the sole precaution of washing immediately afterward. The steam that I voluntarily inhaled never caused me the least sickness.

[492] The Çabanè call curare and the plant which produces it irĩwa, and the still unconcentrated liquid from soaking iriwiya. The Tagnani name the plant and the curare nalõç̃.

Rio Juruena

/215 cont./

278 Curare of the Ñambikwara of the Rio Juruena

The technique of the Ñambikwara of the right bank of the Rio Juruena is more primitive.

They use only bark which has just been gathered. The draining off of the bark is done only once and with warm water: the bark /216/ is put on the fire in a rather large amount of cold water, and the operation is ended when the temperature reaches 37° to 40° /centigrade/. It is filtered quickly by squeezing the bark with the hands to extract all the liquid from it. Then comes rapid boiling over a high fire and skimming. After several minutes of a rolling boil the fire is lowered and the liquid kept at a temperature a little below boiling until it has a pasty consistency.

[415] [237] The curare is kept in paste form in bamboo tubes or changed into a very hard mass by the addition of meliponine beeswax.

This method exposes the curare to strong heat for at least two hours. The Çabanè method reduces this time to ten minutes, the other operations being carried out at low heat. Both produce curares with about the same activity.

[192] [411] The Rio Juruena Ñambikwara call curare and the plant a'utlisú or a'ukisú; the roots ta'ñdisú; the poisoned arrow aurú kiritkatsú, and its protective bamboo sheath agirikatsú.

Utilization of Curare

278 411 The Ñambikwara are not familiar with the blowgun. They use curare to poison large arrows with long, notched points, capped with a protective bamboo sheath. The points of the Tamandé curare arrows are shorter and more slender than those of the other Ñambikwara. They are usually placed in twos, threes, and fours under a single protective sheath.

According to the Indians an arrow's activeness does not last more than three or four months. The curare in paste form is kept for a longer time (close to a year). Hard curare can be kept for years.

8:Vellard--16 D.E-S (1938) 1939 SP17 Nambicuara SP17
Çabanè

Plate IV

278
192
415
302
516

A

B

278
415
516

C

Preparation of Çabanè curare (Vilhena region)

A-B. Draining of the bark with cold water.

C. After boiling the liquid is transferred into another receptacle where it will be concentrated at low heat.

Plate V

A

B

C

D

/See captions on next page../

Stvellard--17 D.E-5 (1939) 1939 SP17 Nambicuara SP17

8:Vellard--17a D, E-5 (1938) 1939 SP17 Nambicuara SP17
Çabenè

Plate V

271 Preparation of Çabanè curare (Vilhena region)

A. The curare is skimmed during the boiling.

[Nm] B. Testing of the degree of concentration of the product with the aid of a straw.

[415 824] C. Funnel made of a leaf rolled into a horn and the leaf used to make it.

[415 323] D. A pot of grey clay, badly baked, used to prepare and keep curare (Nhambikwara of the Cabixi River).